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OIL SEAL DEVICE FOR ROTARY SHAFT

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#### ABSTRACT

PROBLEM TO BE SOLVED: To ensure excellent sealing performance of an oil seal with simple components and prevent the bite of a foreign matter by providing a tilt angle between the centerline of a seal lip of the oil seal and the centerline of a rotary shaft in an oil seal device for rotation.

SOLUTION: An oil seal 1 for sealing a rotary shaft 12 is fitted to a housing 20 and provided with a main seal lip 5 at the obliquely extended tip side inner periphery of an inner diameter part 3, and a sub-seal - lip 6 at the root side inner periphery of the inner diameter part 3. The seal lip 5 is provided with a tapered angle part brought into sliding contact with the surface of the rotary shaft 12, and this tapered angle part 8 is formed of two tapered faces 10, 11 different in inclination to the surface of the rotary shaft 12. The housing 20 has the bearing surface 21 with its depth inclined to the centerline Q of the rotary shaft 12, and the seal 1 is mounted in an inclined state along the bearing surface 21 so that the centerline P of the seal lip 5 is inclined by a specified angle  $\theta$  to the centerline Q of the rotary shaft 12.

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